

WHAT IS CLAIMED IS:

1. An apparatus for measuring the temperature in an appliance, the apparatus comprising:
 - a voltage supply;
 - a temperature transducer comprising a variable resistance that changes in response to the temperature;
 - first and second resistors coupled in series between the voltage supply and ground to form a first voltage divider, the junction of the first voltage divider being coupled to an input of a microprocessor so as to provide a signal indicative of the voltage across the first resistor; and
 - a third resistor coupled in series with the temperature transducer between the voltage supply and ground to form a second voltage divider, the junction of the second voltage divider being coupled to an input of the microprocessor so as to provide a signal indicative of the voltage across the temperature transducer;wherein the microprocessor determines a temperature using the voltage across the temperature transducer and the second resistor to determine the resistance of the temperature transducer.
2. The apparatus of claim 1 wherein the first and second resistors each comprise one or more individual resistors interconnected by one or more jumpers to provide suitable resistance values corresponding to the supply voltage.
3. The apparatus of claim 2 wherein the jumper also provides a signal to the microprocessor indicative of the supply voltage or resistance values selected.
4. The apparatus of claim 2 wherein a variable signal indicative of the supply voltage is connected to the microprocessor.

5. The apparatus of claim 1 wherein the microprocessor determines the temperature using a look-up table correlating the resistance of the temperature transducer to the temperature.

6. The apparatus of claim 5 wherein the temperature is corrected by an offset value determined during a calibration routine and stored in memory.